SS – 683

V Semester B.C.A. Degree Examination, November/December 2018
(CBCS) (F + R) (2016-17 and Onwards)
COMPUTER SCIENCE
BCA 502 : Software Engineering

Time : 3 Hours Max. Marks : 100

***Instruction** : Answer **all** Sections.*

SECTION – A

I. Answer **any ten** questions. **(10×2=20)**

1) What is software product ? Name two types of software product.
2) Define system engineering.
3) What is feasibility study ?
4) Define prototype model.
5) What is coupling ? Name two types of coupling.
6) What are OOD and OOP ?
7) What are the advantages of GUI ?
8) Define Test case.
9) Differentiate between verification and validation.
10) Define equivalence class partitioning.
11) Define quality assurance.
12) Define project management.

SECTION – B

II. Answer **any five** questions. **(5×5=25)**

13) Write a note on risk management.
14) Describe system procurement process.
15) Explain the IEEE structure of SRS document.
16) Explain evolutionary and throw-away prototyping.
17) Describe design principles.
18) Write a note on reliability growth modeling.
19) Explain the contents of test plan.
20) Write a note on quality control.

P.T.O.

SECTION – C

III. Answer **any three** questions. **(3×15=45)**

21) a) Explain the different phases of SDLC.

b) Explain system design process with a diagram. **(8+7)**

22) Explain the requirement engineering process. **15**

23) a) Explain function oriented design.

b) Explain different styles of user system interaction. **(8+7)**

24) a) Explain different types of cohesion.

b) Explain software reuse. **(8+7)**

25) a) Describe clean room software development process.

b) Explain different types of software maintenance. **(8+7)**

SECTION – D

IV. Answer **any one** question. **(1×10=10)**

26) Explain spiral model with a neat diagram. Mention its merits and demerits.

27) Explain COCOMO model in detail.

SN – 663

V Semester B.C.A. Degree Examination, Nov./Dec. 2017
(2016-17 and Onwards) (CBCS) (F + R)
BCA 502 : SOFTWARE ENGINEERING

Time : 3 Hours Max. Marks : 100

Instruction : *Answer* ***all*** *Sections.*

SECTION – A

I. Answer **any ten** questions. **Each** question carries **two** marks. **(10×2=20)**

1) Define system.
2) What are the two types of software products ?
3) What is system decommissioning ?
4) Mention two advantages of prototype model.
5) Define cohesion.
6) Define object and class.
7) What are the characteristics of GUI ?
8) Define SRS.
9) Define Risk.
10) Differentiate between verification and validation.
11) Define reliability.
12) What is a test case ?

SECTION – B

II. Answer **any five** questions. **Each** carries **five** marks. **(5×5=25)**

13) Explain waterfall model with its advantages and disadvantages.
14) What are volatile requirements ? Explain the classification of volatile requirements.
15) Explain the different phases of system design process with a diagram.
16) What is fault tolerance ? Explain the two approaches to software fault tolerance.
17) Differentiate between black box and white box testing.

P.T.O.

18) Explain the quality characteristics of design.
19) Describe different requirement validation checks.
20) Explain types of software maintenance.

SECTION – C

III. Answer **any three** questions. **Each** question carries **fifteen** marks. **(3x15=45)**

21) a) Explain requirement elicitation and analysis process of requirement engineering with diagram.
    b) Explain IEEE structure of SRS document. **(8+7)**
22) a) Explain design principles in detail.
    b) Explain two types of prototyping with advantages and disadvantages. **(8+7)**
23) a) Explain different reliability metrics.
    b) Explain reliability growth modeling. **(7+8)**
24) a) Write a note on object oriented design concept.
    b) Explain different styles of user system interaction. **(7+8)**
25) a) Explain various levels of testing.
    b) Explain the contents of test plan template. **(6+9)**

SECTION – D

IV. Answer **any one** question. **Each** carries **ten** marks. **(1x10=10)**

26) Explain COCOMO model in detail.
27) Explain system engineering process with a neat diagram.

NS – 612

V Semester B.C.A. Degree Examination, Nov./Dec. 2016
(CBCS) (2016-17 and Onwards)
COMPUTER SCIENCE
BCA 502 : Software Engineering

Time : 3 Hours Max. Marks : 100

Instruction : *Answer* ***all*** *Sections.*

SECTION – A

Answer **any ten** questions. **Each** question carries **two** marks : **(10×2=20)**

1. What is customized software product ? Give an example.
2. What is COTS ?
3. What is feasibility study ?
4. What is 4GL ?
5. Define coupling.
6. What are OOD and OOP ?
7. What is user interface prototyping ?
8. Difference between fault and failure.
9. What do you mean by cyclometic complexity ?
10. What is interface testing ?
11. Define quality planning.
12. What is software maintenance ?

SECTION – B

Answer **any five** questions. **Each** question carries **five** marks : **(5×5=25)**

13. Discuss the challenges of software engineer.
14. Write a note on system realibility engineering.
15. Explain the phases of requirement elicitation and analysis process.

P.T.O.

16. Explain the methods for object identification.
17. Write a short note on user inerface design.
18. Explain realibility growth modeling with its advantages.
19. Explain thread testing with a diagram.
20. Explain quality assurance in brief.

SECTION – C

Answer **any three** questions. **Each** question carries **fifteen** marks : **(3×15=45)**

21. Explain spiral model with a neat diagram. Discuss its advantages and disadvantages. **15**

22. a) Explain various requirement validation techniques. **9**
    b) Explain evolutionary prototyping with a diagram. **6**

23. a) Explain different types of cohesion with example. **9**
    b) Explain functional oriented design with example. **6**

24. a) Describe the five types of user system interaction. **8**
    b) Explain four types of software realibility matrices. **7**

25. a) Explain any two types of software testing. **8**
    b) Explain quality control in brief. **7**

SECTION – D

Answer **any one** question. **Each** question carries **ten** marks : **(1×10=10)**

26. Explain waterfall model with a neat diagram. Mention its merits and demerits. **10**

27. Write short note on :
    a) Risk Management **5**
    b) COCOMO model. **5**

UN – 322

V Semester B.C.A. Degree Examination, Nov./Dec. 2015
(Y2K8 Scheme) (F + R)
BCA 501 : SOFTWARE ENGINEERING
(100 – 2013-14 and Onwards) (90 – Prior to 2013-14)

Time : 3 Hours Max. Marks : 90/100

Instructions : *Section – **A, B, C** is **common** to **all**. Section – **D** is applicable to the students who have admission in **100** marks.*

SECTION – A

Answer **any ten** questions. **Each** question carries **2** marks. **(10×2=20)**

1. What is software product ? Name two types of software product.
2. What is the difference between software engineering and system engineering ?
3. What is system decommissioning ?
4. What are functional requirements ? Give one example.
5. Define cohesion and coupling.
6. What is test case ? Give one example for test case.
7. Define volatile requirement.
8. List different phases of project management.
9. What is quality assurance ? What is the purpose of quality assurance ?
10. Define reliability. Mention its types.
11. Write any two characteristics of GUI.
12. What is fault detection and recovery ?

SECTION – B

Answer **any five** questions. **Each** question carries **5** marks. **(5×5=25)**

13. Discuss the challenges of software engineer.
14. Explain system procurement process in detail.

P.T.O.

15. Explain prototyping model.
16. Describe any two styles of user system interaction.
17. What is risk identification ? Explain its techniques.
18. Write a short note on black box testing.
19. Explain different types of interface errors.
20. Explain different types of software reliability metrics.

SECTION – C

Answer **any 3** questions : **(3×15=45)**

21. Explain spiral model with neat diagram. Discuss advantages and disadvantages. **15**
22. a) Explain requirement elicitation and analysis process. **8**
    b) Discuss object oriented design process in detail. **7**
23. a) Explain IEEE structure of SRS. **10**
    b) Write SRS for library system. **5**
24. a) Explain the contents of test plan. **8**
    b) Explain different levels of testing. **7**
25. a) Explain quality control in detail. **8**
    b) Write a short note on software productivity. **7**

SECTION – D

Answer **any 1** question. **Each** question carries **ten** marks. **(1×10=10)**

26. Explain the fundamental process activities involved in SDLC with neat diagram. **10**
27. Write a short note on :
    a) Context model. **5**
    b) COCOMO model. **5**